#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022670 Address: 333 Burma Road **Date Inspected:** 12-Apr-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Li Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

## **Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

## OBG # CROSSBEAM CB17

This QA observed ZPMC qualified welding personnel identified as 041713 perform Shielded Metal Arc Welding (SMAW) Process of buttering (weld build up) on Stiffener. ZPMC Quality Control Personnel (QC) identified as Mr. Li yang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and Weld Repair B-WR20342. See attached photos.

#### OBG # CROSSBEAM CB18

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

## OBG # CROSSBEAM CB19

This QA observed that no significant work was being performed on this crossbeam during the time QA was

## WELDING INSPECTION REPORT

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present.

#### **OBG # SEGMENT 13AW**

This QA observed ZPMC qualified welding personnel identified as 205098 perform Shielded Metal Arc Welding (SMAW) Process on weld joint SEG3013AD-070. ZPMC Quality Control Personnel (QC) identified as Mr. Shen jian bo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA observed ZPMC qualified welding personnel identified as 069683 perform Shielded Metal Arc Welding (SMAW) Process repair welding on weld joint SEG3013AA-116. ZPMC Quality Control Personnel (QC) identified as Mr. Shen jian bo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and Critical Weld Repair B-CWR2921.

This QA observed ZPMC qualified welding personnel identified as 205098 perform Shielded Metal Arc Welding (SMAW) Process repair welding on weld joint SEG3013V-461,462. ZPMC Quality Control Personnel (QC) identified as Mr. Shen jian bo was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and Critical Weld Repair B-CWR2875.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





## **Summary of Conversations:**

As mention above

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Sukanthan, Dhanasingh Quality Assurance Inspector **Reviewed By:** Hall,Steven QA Reviewer